

Ecosystem Services Payments: Past, Present and Future

Bellagio, Italy

September 5-9, 2016

Tundi Agardy, Director, Marine Ecosystem Services Program, Forest Trends Association

Tundi is an internationally renowned expert in marine conservation, with extensive field and policy experience in Africa, Asia, the Caribbean, the Mediterranean, North America, and the Pacific. Tundi specializes in coastal planning and assessment, marine protected areas, fisheries management and ocean zoning, and has published widely in these fields. She founded Sound Seas in 2001 as an independent group working at the nexus of policy and science to promote marine conservation. At Forest Trends, she is heading up the MARES initiative – a program looking to protect Marine Ecosystem Services through Payments for Ecosystem Services (PES) markets. Tundi works with international think tanks, foundations, multilaterals, museums and academic institutions, environmental groups, and consortia with interest in solving local and regional coastal and marine conservation problems. She completed her undergraduate work at Wellesley and Dartmouth Colleges and then received her Ph.D. in biological sciences and Masters in Marine Affairs from the University of Rhode Island and was postdoctoral fellow at the Woods Hole Oceanographic Institution. She has served as Senior Scientist for the World Wildlife Fund and began Conservation International's Global Marine Program, which she oversaw as Senior Director. She also led the coastal portion of the Millennium Ecosystem Assessment – a 3-year global analysis released in 2005 that represents the consensus of over a thousand scientists on the state of the world's ecosystems.

Kathleen Bennett, Portfolio Manager, Latin America, Kiva Microfunds

Founded in 2005, Kiva operates a website where its Field Partners can post loans for interest-free crowd-funded financing by individual lenders from across the globe. Kiva partners with a range of organizations, including microfinance institutions (MFIs), social businesses, schools, and nonprofits. These organizations are united by a strong commitment to serving the needs of poor, vulnerable, and/or excluded populations, either through financial services or by using credit to expand access to beneficial products and services. Ms. Bennett has held multiple positions at Kiva since 2011, and currently serves as a Portfolio Manager. Previous work experience includes consulting for USAID, and positions held with idealist.org, Manna Project international, and Leadership for a Changing World Program.

David Brand, Founder and member of the Board of Directors, New Forests

David Brand founded New Forests in 2005 and leads the company's investment programs. He is a member of New Forests' Board of Directors and is the Chair of the company's Investment Committee. David has over 30 years' experience in timberland investment, forest management, science, and public policy. David is dedicated to innovative, responsible investment strategies in the forest sector and associated assets, including infrastructure, bioenergy, and environmental markets. Previously, David was responsible for investment programs that integrated timber management with emerging environmental market opportunities at Hancock Natural Resources Group (HNRG). Prior to joining HNRG, David was the Executive General Manager of State Forests of NSW where he led pioneering transactions in the commercial development of environmental markets. From 1985-1995 David worked with the Canadian Forest Service as a scientist, director of scientific programs, and ultimately as national Director-General of Science and Sustainable Development. He serves on the Board of Directors of the Washington, DC-based organization Forest Trends. David has a PhD from the University of British Columbia and a Bachelor of Science in Forestry from the University of Toronto in Canada.

Jan Cassin, Director, Water Initiative, Forest Trends Association

Jan is an ecologist with expertise in terrestrial, marine, and freshwater systems. Her career has emphasized applied research and practice in a wide range of water resource management issues – including integrated watershed management, environmental flows assessment, ecosystem services quantification, and innovative financial mechanisms such as wetland banking, and investments in watershed services (IWS). Jan currently directs Forest Trends' Water Initiative, working in partnership with businesses, governments, and communities in Latin America, Asia, and Africa, to implement and scale up natural, or green, infrastructure solutions for water. A particular focus of this work is on developing the knowledge base and practical tools for documenting the performance of green infrastructure in delivering not only water-related services, such as water quality, water supply, and flood mitigation outcomes, but as an essential component in achieving multiple Sustainable Development Goals. Jan has also worked with the Business and Biodiversity Offset Programme to support and promote the use of best practices in biodiversity offsets and biodiversity conservation. Prior to joining Forest Trends, Jan received her Doctorate at the University of Michigan and worked for eleven years as a senior

project manager and ecologist for Parametrix, a Seattle-based engineering and environmental consulting firm, and for nine years as a biologist for The Nature Conservancy. Jan developed recommendations to the Puget Sound Partnership on the use of innovative financial mechanisms for the recovery of the Puget Sound ecosystem, worked with the Puget Sound Restoration Fund to establish a payments for services pilot for nitrogen removal by shellfish in Puget Sound, and led studies evaluating impacts of flow alteration on aquatic ecosystems in the Pacific Northwest.

Al Cho, Vice President for Strategy and Business Development, Xylem Inc.

Since joining Xylem in 2013, he has been responsible for corporate and business strategies, market intelligence, and business development activities across the global ~\$4 billion enterprise. Before Xylem, Cho served as Senior Advisor to the Deputy Secretary at the United States Department of State, where he was a White House Fellow and served on Secretary Clinton's Policy Planning Staff. Previously, he was an executive at Cisco Systems, where he led strategy and innovation projects applying information technology to environmental challenges, including development of a new remote sensing-based system for monitoring deforestation.

Cho also worked at McKinsey & Company, where he helped found the Sustainability and Resources Practice and advised clients in the aerospace, industrial, high tech and financial sectors on growth strategy and risk management. He also served at the United Nations with Undersecretary General Jeffrey Sachs on a global plan for achieving the Millennium Development Goals. Albert has lived, worked or traveled in over 70 countries, including extended periods supporting financial sector reform in Libya, health system reform in the United Kingdom, and low carbon development planning in Guyana. He is a Rhodes and a Truman Scholar, a term member of the Council on Foreign Relations, and was a Visiting Business Fellow at Oxford. He received an M.Sc in development economics and an M.B.A. with distinction from Oxford, and graduated *summa cum laude* and Phi Beta Kappa from Harvard College.

Ken Chomitz, Chief Analytics Officer, Global Innovation Fund

Ken Chomitz is currently the chief analytics officer at the Global Innovation Fund. Previously he was Senior Advisor in the Independent Evaluation Group of the World Bank. He coauthored the World Development Report 2016 on Digital Development. He also worked in the Bank's Development Research Group. Chomitz's work has focused on global environmental issues and on monitoring and evaluation. At IEG he led three major evaluations of the Bank Group's work on climate change, and chaired the Independent Evaluation of the Climate Investment Funds. He was a coauthor of the Bank's *World Development Report 2003: Sustainable Development in a Dynamic World* and author of *At Loggerheads? Agricultural Expansion, Poverty Reduction and Environment in the Tropical Forests*. Chomitz was a pioneer in econometric modeling of deforestation using remote sensing data. He has published articles on economic issues related to deforestation, biodiversity, and climate change, and has also worked on issues related to health, population, and labor. Chomitz holds a degree in mathematics from MIT and a PhD in Economics from the University of California, Irvine. Prior to joining the World Bank, he was a National Research Council Fellow at the U.S. National Academy of Sciences; Assistant Professor of Economics at Boston University; and Senior Advisor with the Development Studies Project, a policy research institute associated with the Indonesian National Development Planning Board.

René Gómez-García, Senior Executive of Environment, CAF Development Bank of Latin America

René Gómez-García works at the Development Bank of Latin America (CAF) since 2006 where he currently heads the Green Business Unit. In his tenure at CAF was member of teams which lead CAF to achieve world class standards in environmental and social management and the rise of sustainable development financial Operations. This team work also supported the accreditation of CAF as implementing agency for the GEF and the GCF; and among others strategic activities, the design and implementation of programs in forest conservation, ecosystem services, coastal and marine biodiversity, CAF Amazon Vision, credit lines for green business and energy efficiency, the Latin American Cacao Initiative, eco-tourism and biotrade.

Dr. Gómez-García is a civil engineer (ITESM-MEX, 1984), holds a M.S. in irrigation engineering (USU-USA, 1989) and Ph.D. in civil engineering / hydrology (U.C. Davis-USA, 1993). He is married with Patricia Alvestegui and they have three children, Martin, Daniel and Sol Patricia.

In 30 years of professional career, he worked for the German consulting firm Salzgitter Consult, for the US Army Corps of Engineers at the Hydrological Engineering Center. He has participated in major infrastructure Projects in Latin America, during his first years as civil engineer/construction manager and later on as environmental management manager. Dr. Gómez-García, as senior advisor for major contractor and consulting firms and for the most important multilateral financial institutions, was part of working teams related to water resources management, hydrology analysis revision panels, environmental management and policy and the design

of strategies for the integrated implementation of major hydro infrastructure projects.

In his country, Bolivia, Dr. Gomez Garcia was invited to hold public offices; first, as Chief Executive of the National Social Fund (2000-2001) dedicated to implement infrastructure and promote social and environmental good practices at subnational levels and later as Minister of Public Services and Works (2003-2005) in charge of national policies in water management, transportation, communications, energy and housing.

Michael Jenkins, President & CEO, Forest Trends Association

Michael Jenkins is the founding President and CEO of Forest Trends, a non-profit organization based in Washington, DC. Forest Trends' mission is to expand the value of forests to society; to promote sustainable forest management and conservation by creating and capturing market values for ecosystem services; to support innovative projects and companies that are developing these markets; and to enhance the livelihoods of local communities living in and around those forests.

From 1989-1999, he was the Associate Director for the Global Security and Sustainability Program of the MacArthur Foundation. Michael's responsibilities with the Program included all grant-making in Latin America and the Caribbean, as well as overarching program management. In 1998, Michael was in a joint appointment as a Senior Forestry Advisor to the World Bank. Before entering the MacArthur Foundation, he worked for three years as an agroforester in Haiti with the USAID Agroforestry Outreach Program. Previous to that, he worked with a Washington-based development organization, Appropriate Technology International, as a technical advisor. In the late 1970s, Michael was a Peace Corps volunteer in Paraguay working in agriculture, apiculture, and forestry projects. He has traveled and worked throughout Latin America, Asia and parts of Africa, and speaks Spanish, French, Portuguese, Creole and Guaraní.

Michael holds a Master's of Forest Science from Yale University, and has contributed to and authored numerous books/publications, including *The Business of Sustainable Forestry: Strategies for an Industry in Transition* and *Capital Markets and Sustainable Forestry: Opportunities for Investment*.

In 2010 he received the Skoll Award for Social Entrepreneurship, and in 2015 the Social Entrepreneur Award from the Schwab Foundation. Also in 2015, Forest Trends was awarded the 2015 Award for Creative and Effective Institutions from the MacArthur Foundation.

Martin Ma, Managing Director, Solidaridad China

Martin started his career in CSR 11 years ago when he joined Social Accountability International. At SAI, he'd been closely involved with research, stakeholder engagement, SA8000 guidance revision, and development of capacity building programs for workers and managers of numerous Chinese suppliers.

Since 2006, Martin has been managing Solidaridad's China program focusing on promoting sustainable production and consumption of commodities such as cotton, soybean, and tea. Considering the enormous size of China's agricultural sector, Solidaridad China relies on a holistic approach to promote sustainability, i.e., on top of the traditional supply chain improvement activities, Solidaridad invests intensive efforts in creating *local* stakeholder platforms to promote shared responsibility among all stakeholders of the value chains. Solidaridad is currently helping thousands of Chinese soybean farmers to adopt sustainable production practices and attempting to mobilize the Chinese market demand for soybean produced sustainably in other parts of the world.

Forrest Melton, Senior Research Scientist in the Division of Science and Environmental Policy at California State University, Monterey Bay, and the NASA Ames Cooperative for Research in Earth Science and Technology (ARC-CREST)

Forrest Melton is a Senior Research Scientist in the Division of Science and Environmental Policy at California State University, Monterey Bay, and the NASA Ames Cooperative for Research in Earth Science and Technology (ARC-CREST). Since 2003, he has worked in the Ecological Forecasting Lab at NASA Ames Research Center on the development of modeling and data assimilation frameworks including the Terrestrial Observation and Prediction System (TOPS) and the NASA Earth Exchange (NEX). His research interests include ecosystem and carbon cycle modeling, and applications of satellite data and ecosystem models to improve management of natural resources. Forrest holds B.S. and M.S. degrees in Earth Systems Science from Stanford University, and has authored numerous papers and book chapters on applications of remote sensing. He is the recipient of honor awards from NASA for his contributions to TOPS and NEX, and has been recognized for his work on applications of satellite data for water management with awards from the California Department of Water Resources and the Federal Labs Consortium.

Dr. Fernando Momiy Hada, President of Directing Council, SUNASS

Fernando Momiy Hada has been Chairman of the Board of SUNASS since April 2012. He was trained as a lawyer at the Pontifical Catholic University of Peru (PUCP) and earned a Master of Business Administration from the Graduate School at St. Ignacius of Loyola University. Has completed a Master of Regulation and Infrastructure Management at the Pacific University, having passed the course Determining Rates in Infrastructure Areas of San Andres University - Department of Economy in Argentina and School of Management Development Program of Piura University. He was a Regulation Manager of the Supervisory Regulation on Investment in Infrastructure Public Transport (OSITRAN) and Director of Regulation, Promotion and Airport Development in the General Direction of Civil Aviation (DGCA) of the Ministry of Transport and Communications. He has also has served as Technical Secretary of CEPRI Citizen Participation, Special Committee COPRI - Commission for the Promotion of Private Investment (now ProInversión). At SUNASS he previously performed the roles of Manger of Administration and Finances, President of the Administrative Tribunal of User Claims Settlements, and General Manager.

Jacob Olander, Canopy Bridge

Over the course of 25 years of living in Latin America, Jacob has been a pioneer in crafting new approaches to financing the conservation of nature, including the development of non-timber forest products, climate-change forestry projects, payments for ecosystem services and new long-term funding mechanisms for conservation areas and indigenous communities. Jacob completed his undergraduate degree in Development Studies at Brown University and a Masters in International Agriculture and Rural Development at Cornell.

In 1996, with his partner, Marta Echavarría, he founded EcoDecisión, a private firm recognized as a leader in the fields of environmental services and ecosystem finance in Latin America for almost two decades. Jacob established and ran the Katoomba Incubator, in partnership with Forest Trends, providing technical and business development support to bring to market community-based forest carbon projects in Brazil, Peru, Ecuador, Mexico, Ghana, Honduras and Ghana, and has edited comprehensive guidance for project development, advised governments on forest carbon and REDD+ policy.

Jacob has worked extensively in community-based and private-lands conservation, helping to establish in Ecuador the first conservation easements in South America. He established and still oversees one the world's longest-running butterfly farms, which rears and sells live chrysalids to dozens of museums, zoos and botanical gardens around the world. Jacob started his career working with immigrants on the south side of Providence, Rhode Island, organizing efforts to reclaim and revitalize blighted neighborhoods through community gardens and urban agriculture, before moving to Costa Rica to conduct research on the ecology and economics of non-timber forest products of the Caribbean rainforest and then to Colombia for several years with Afro-Colombian communities in the extraordinarily rich forests of the Chocó.

His latest initiative, Canopy Bridge, provides support to companies and communities committed to sustainable sourcing of natural products, from coffee and cacao to camu camu and sacha inchi, through an online platform, sourcing intelligence and business development support.

Manuel Pulgar-Vidal Otorola, recent Minister of the Environment, Peru

Lawyer specializing in environmental law and policy, Mr. Pulgar-Vidal recently served as the Minister of State for Environment. Former experience includes service as Executive Director at the Peruvian Society for Environmental Law; President of Interamerican Association for Environmental Defense, AIDA Fund Steering Committee for the Conservation of Watersheds and Water Resources of Lima and Callao, AquaFund; President, Permanent Seminar on Agricultural Research; Director, National Fund for Natural Areas Protected by the State, PROFONANPE; Alliance Director, Tropical Andes. Teaches Environmental Law, Natural Resources Management and Mining, Energy and Environment, and Programme Coordinator, Second Specialization in Environmental Law and Natural Resources, Pontifical Catholic University of Peru.

Kristin Rechberger, Founder & CEO, Dynamic Planet

Kristin Rechberger founded Dynamic Planet in 2012 to scale successful conservation initiatives through business. Prior to founding Dynamic Planet, Kristin was Senior Vice President of Global Programs and Partnerships at the National Geographic Society, where over 14 years she helped lead its global expansion by launching and growing its international cable channels, global corporate partnerships division, and global research, conservation, and exploration programs. Before joining National Geographic, Kristin lived in Seoul, Korea and explored Asia as a Luce Foundation Fellow, designing informal educational systems and traveling extensively

producing documentary films. In 2009, Kristin was selected to join the Young Global Leader community of the World Economic Forum where she currently serves on the Advisory Council and works with several initiatives including oceans, the shared economy, and the future of global development. Kristin has a public policy degree and documentary film certificate from Duke University and has completed executive programs at Harvard, Stanford, and Oxford, and is certified with the Global Sustainable Tourism Council.

James Salzman, Donald Bren Professor of Environmental Law and Policy with joint appointments at UCLA's law school and UCSB's school of the environment

James formerly held joint appointments at Duke University as the Samuel F. Mordecai Professor of Law and Nicholas Institute Professor of Environmental Policy. In more than eight books and eighty articles and book chapters, his broad-ranging scholarship has addressed topics spanning drinking water, trade and environment conflicts, policy instrument design, and the legal and institutional issues in creating markets for ecosystem services. A 2012 study by Phillips and Yoo ranked him as the fifth most cited environmental law professor in the field.

An honors graduate of Yale College and Harvard University, Salzman was the first Harvard graduate to earn joint degrees in law and engineering and was named a Sheldon Fellow upon graduation. He has both government and private sector work experience. Prior to entering academia, he worked in Paris in the Environment Directorate of the Organization for Economic Cooperation and Development (OECD) and in London as the European Environmental Manager for Johnson Wax. His honors include election as a Fellow of the Royal Geographical Society, as well as appointments as a McMaster Fellow and Fulbright Senior Scholar in Australia, a Gilbert White Fellow at Resources for the Future, and a Bellagio Fellow at the Rockefeller Foundation, among others. Salzman is active in the fields of practice and policy, serving as a Member of the Trade and Environment Policy Advisory Committee, a government-appointed body providing counsel to the EPA Administrator and U.S. Trade Representative on trade and environment issues, as well as advising several environmental non-profits.

His most recent book, *Drinking Water: A History*, was praised as a "Recommended Read" by *Scientific American* and reviewed in the *New York Times* and *Washington Post*. It is now in paperback and in its third printing.

Kerry ten Kate, Director, Biodiversity Initiative, Forest Trends Association

Kerry ten Kate directs Forest Trends' Biodiversity Initiative and is also the Director of the Business and Biodiversity Offsets Programme (BBOP): a consortium of over 70 companies, banks, government agencies and NGOs working for no net loss of biodiversity in the context of development projects. Formerly a barrister practicing in London, Kerry served on the Secretariat of the United Nations Conference on Environment and Development in 1992 (the "Rio Earth Summit") then founded the consultancy Environmental Strategies. She was Director of Investor Responsibility at asset manager Insight Investment and policy adviser and head of the CBD Unit at the Royal Botanic Gardens, Kew. Kerry has written over 100 articles for publications including *Science* and *International Affairs*, broadcast on BBC Radio 4 and the World Service, and is a member of the UK's Natural Capital Committee. She's a member of IUCN's Species Survival Commission, a Conservation Fellow at the Zoological Society of London and a member of the Aldersgate Group.

Will Tucker, Senior Communications Associate, Forest Trends Association

Will Tucker is the Senior Communications Associate at Forest Trends, where he helps coordinate engagement with internal and external audiences. His principal responsibilities include conducting media outreach and managing Forest Trends' social media presence. Prior to joining Forest Trends, Will worked as a communications specialist at a not-for-profit organization focused on international public health and alcohol policy and as a national writer for a college basketball website. He holds a BA in History from the George Washington University, where he also studied climate change communication and held an internship at the Center for Health, Environment & Justice (CHEJ).

Alvaro Umaña, Senior Research Fellow, CATIE; former Minister of the Environment, Costa Rica

Alvaro Umaña is a Senior Research Fellow at CATIE, the Tropical Agricultural Research and Higher Education Center. He served as Costa Rica's first Minister of Environment and Energy and was that country's ambassador at the United Nations Copenhagen Climate Change Conference, where Costa Rica introduced its carbon neutrality pledge to become the first climate neutral country by 2021. His international career includes a wide range of experiences in academia, public service, government, and non-governmental

organizations including UNESCO, UNDP, and the World Bank. Umaña has authored or contributed to numerous books and articles in the areas of energy, conservation and biodiversity. Umaña holds a doctorate in environmental engineering; a master's degree in economics from Stanford University, and a bachelor's degree in physics from Penn State.

Heather Wright, Program Officer for the Forests and Agricultural Markets and the Conservation and Financial Markets initiatives, Gordon and Betty Moore Foundation

Heather also managed a portfolio oriented toward mainstreaming ecosystem services in natural resource decision-making, and mitigating climate change impacts by addressing deforestation and degradation. She serves as the Foundation's representative to the Climate and Land Use Alliance. Prior to joining the foundation, Heather was a rapid assessment program manager at Conservation International, where she led global assessments in critical ecosystems to inform natural resource management decisions. As program manager at Friends of the Osa, she focused on applied conservation and research in Costa Rica. Heather has served as a Yale Forestry and Environmental Studies Alumni board member and Conservation Measures Partnership board member and currently sits on the Kinship Conservation Advisory Board. Heather received a B.S. in Biology and Minor in Scandinavian literature from University of California, Los Angeles, and a Master's degree in Science from Yale University's School of Forestry and Environmental Studies. She was awarded a Kinship Conservation Fellowship in 2010.

Andrew Zolli, VP, Global Impact Initiatives, Planet Labs

Working at the intersection of global innovation, foresight, social change and resilience, a central thrust of his work has been how to harness the power of networks for collaborative discovery, innovation and change. He spends much of his time advancing a global dialogue on resilience – how to help people and systems persist, recover and thrive amid disruption. After publishing his work *Resilience: Why Things Bounce Back*, he has focused on bringing together coalitions of interested practitioners and leaders from many related fields, developing new, interlocking strategies for personal, urban, community, climate, and organizational resilience.

From 2003-2014, he was the primary creative and curatorial force behind PopTech, a renowned innovation and social change network. He has also served as a Fellow of the National Geographic Society, and advises and speaks regularly to a wide array of leading companies, governmental organization, NGOs, startups and cultural and civil society groups. He serves as an advisor to PlanetLabs, DataKind, and The Workshop School, among many others.